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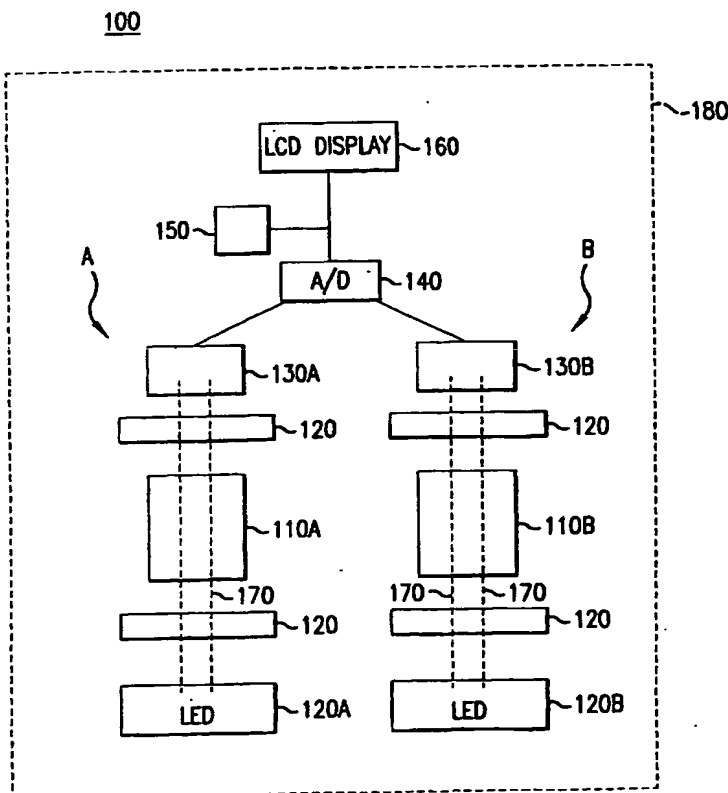
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[Continued on next page]

(54) Title: AN ARSENIC METER



(57) Abstract: A field test-kit for analyzing arsenic concentration in water samples includes a portable infrared beam photometer for measuring light absorbance in aqueous specimens. An infrared light emitting diode (120A, 120B) is configured to direct a beam of light through a specimen. A photodetector diode (130A, 130B) measures the intensity of light passing through the specimen. The photodetector (130A, 130B) output voltages relate to the light absorbed in the specimen and are displayed on a LCD (160) screen. To test for arsenic, molybdenum-blue color complexes. The light absorbance of a specimen with both arsenates and phosphates bound in molybdenum-blue color complexes is compared to that of a reference specimen in which phosphates but not arsenates are bound and converted. A quantitative value for the arsenic concentration in the water sample is determined from the differential light absorbance of the two specimens.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/26484

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01J 03/46; G01N 21/25

US CL : 356/402, 407, 409, 414

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 356/402, 407, 409, 414

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONEElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,059,790 A (KLAINER et al) 22 October 1991, see entire document.	1-18

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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